Barriers and drivers of using transaction accounts in driving electronic payments: A consumer perspective in Southern Africa

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Sithembinkosi, Dube

(DBXSIT007)

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Supervisor: **Dr Abdul Latif Alhassan**

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ABSTRACT

This study aims to explore barriers and drivers of transactional accounts usage for electronic payments in South Africa and Zimbabwe through quantitative demand side research. This study targeted 200 respondents based on the convenience sampling technique, for a period of 2 years (2016-2017) after which a multiple regression model to examine the barriers and drivers of transaction accounts usage for electronic payments.

The study found that customers' perception towards transaction accounts usage which reflects electronic payment services is high in South Africa and Zimbabwe. The regression results indicate that three factors in costs, accessibility, and ease of use are significantly associated with consumers' perception towards transaction accounts usage. Remarkably, security and income levels are not significantly associated with consumers' perception towards transaction accounts usage although the correlation-coefficient results show otherwise.

As a result, the researcher recommends that Southern African banks and online transaction facility providers should constantly be enhancing their transactional account services in view of the promising growth rate. It is vital that the services provided must meet customers' expectations. The electronic payments systems must demonstrate convenience and effectiveness in real world to tape huge market share from cash. The providers of transactional account systems are required to retain an innovative and competitive environment in order to create new enhanced products and services to lower transactional costs for customers and companies. Furthermore, the results of this study serve as a guide to inform the service providers so that suitable approaches can be established to increase the usage of transaction accounts for electronic payments. As services are enhanced, the features must be communicated to improve end users' awareness.

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I dedicate this dissertation to my parents, who despite their humble and rural upbringing have always encouraged and allowed myself to seek the best education from the best institutions regardless of the obstacles they faced.

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LIST OF ACRONYMS

ATM	Automated Teller Machines
AMFI	Association of Micro Finance Institutions
BTCA	Better than Cash Alliance
CGAP	Consultative Group to Assist the Poor
FAO	Food and Agriculture Organization of the United Nations
FI	Financial Institution
FSDT	Financial Sector Deepening Tanzania
GDP	Gross Domestic Product
IISD	International Institute for Sustainable Development
OLS	Ordinary Least Squares
POS	Point of Sale
SADC	Southern African Development Community
SSA	Statistics South Africa
SME	Small and Medium-sized Enterprises
USD	United States Dollar
RBZ	Reserve Bank of Zimbabwe
ZAR	South African Rand

CHAPTER ONE
INTRODUCTION

1.1. Background of the Study

Lack of usage of payment instruments has limited the value formal financial services holds to consumers and the development of digital payment eco-systems. This study aims to explore barriers and drivers of usage of transaction accounts for electronic payments in South Africa and Zimbabwe through qualitative demand-side research. Financial inclusion diagnostics conducted in SADC by FinScope 2012 shown that "the lack of functioning digital payment eco-systems are one of the critical barriers to unlocking the potential of financial inclusion to drive welfare and economic development".

The use of cash for payments is expensive, risky and inefficient for providers and the broader economy and limits the benefits the formal financial sector can provide for consumers. A transition to digital payment ecosystems can address these concerns; however, driving greater use of digital payment instruments has proven very challenging and as result over 90% of consumers in SADC still makes payments in cash (Global FinDex, 2015).

Increasing the number of people that have access to bank or mobile accounts is seen as a key first step to transition into digital payments. Institutions such as the Better than Cash Alliance (BTCA) therefore propose that donor and government salary or grant payments to be made into bank and mobile accounts. However, experience has shown that account holders continue to transact in cash, rather than use the payment instruments available through their accounts. In most SADC countries only around 25% of accounts are active. Over 30% of accounts are dormant and more than 40% of accounts are used purely as a mailbox, where salaries are received and immediately encashed (Global FinDex, 2015).

This study seeks to better understand what the consumer perceives to be barriers and drivers to usage of electronic payment instruments, specifically for those that hold accounts as the "easier to reach" market. This study will also inform providers to improve their service design and partnership approach to drive usage, as well as regulators to better understand key components of payment eco-system development.

1.2. Statement of Research Problem

In southern African countries particularly South Africa and Zimbabwe, lack of usage of payment instruments has limited the value formal financial services holds to consumers and the development of digital payment eco-systems. The use of cash for payments is expensive, risky and inefficient for providers and the broader economy and limits the benefits the formal financial sector can provide for consumers. According to the report by FinScope (2012) on financial inclusion which was conducted inSouth Africa and Zimbabwe, lack of effective digital payment eco-systems is a major constraint in unlocking the potential of financial inclusion in driving welfare and economic development.

Access to and usage of a transaction account to facilitate payments and to store value is just an initial step in becoming fully financially included, which involves having access to the whole range of financial products and services that meet the user's needs.

Key questions to examine through this study include:

1. What are the determinants of usage of transaction accounts as it affects electronic payment?

1.3. Research Objectives

The main objective of this study is to identify the determinants of usage of transaction accounts in driving electronic payments.

The corresponding hypothesis for the stated objective is;

H1: The usage of transaction accounts to enhance electronic payment is not significantly affected by (a) Costs (b) Income levels (c) Accessibility, (d) Ease of Use (e) Security

H2: The usage of transaction accounts to enhance electronic payment is significantly affected by (a) Costs (b) Income levels (c) Accessibility, (d) Ease of Use (e) Security

1.4. Justification of the study

The research gap identified in this study concerns the lack of functioning digital payment eco-systems are one of the critical barriers to unlocking the potential of financial inclusion to drive welfare and economic development. This study has narrowed the gaps of previous research in terms of investigating the five factors in a single setting. It has advanced the mainstream literature concerning transaction accounts usage in driving e-payments acceptance in developing countries.

The findings of this study will be of significance to various stakeholders; scholars and researchers who will use these findings as a basis to build on and carry out further research in future. Policy makers and Government ministries who can gain a better understanding of the dynamics of e-payment acceptance in developing countries and work together to build policies which seek to stimulate increased of electronic payment for financial inclusion. Through the findings of this research, FIs will be able to create well-tailored solutions to e-payment acceptance in developing countries thereby promoting financial inclusion and economic growth.

1.5. Chapter Organisation

This research is divided into five chapters.

Chapter 1 provides an introduction and background to what the consumer perceives to be barriers and drivers to usage of electronic payment instruments, specifically for those that hold accounts as the "easier to reach" market. These are then linked to the research area and problem. The research objectives and questions are presented, and the significance of the research is stated.

Chapter 2 provides a review of literature on barriers and drivers to usage of electronic payment instruments.

Chapter 3 covers the research design and methodology. It discusses how data was collected and the research tools used. The population and sampling are explained and the procedure for data analysis and interpretation outlined.

Chapter 4 presents and discusses the findings of the primary research together with the literature.

Conclusions to the research are stated in Chapter 5 and recommendations for the stakeholders are given

CHAPTER TWO:
LITERATURE REVIEW

2.1. Introduction.

This section begins by interpreting key terms used in this study which provide a suitable background against which the literature review is developed. Next, an overview of electronic payment systems in South Africa and Zimbabwe, followed by a review of what the consumer perceives to be barriers and drivers to usage of electronic payment instruments, specifically for those that hold accounts as the "easier to reach" market. Finally, a review of existing theoretical and empirical literature on barriers and drivers to usage of electronic payment instruments.

2.2. Definitions of transactional accounts

Transaction accounts are electronic payments offered by a bank or other financial services provider. The underlying proposition of a transaction account is to help account holders *manage* their money. It enables the account holder to deposit and withdraw cash, make digital payments to third parties and store electronic value. In addition, an account often, but not always, supports a money management objective by enabling users to keep track of money as it moves into and out of the account. Shoon and Swattman (1998) defined transactional accounts as electronic payment involving exchange of funds initiated via an electronic communication channel, while Gan and Scheeling (1999) defined transactional accounts as means of payment done through electronic signals connected direct to deposits or credits account. Hord (2005) defines electronic as payments represented in any kind of non-cash payment that does not involve a paper cheque. This study adopts these definitions and refers "e-payment to the transfer of an electronic value of payment from a payer to payee through an e-payment mechanism which allows customers to remotely access and manage their bank accounts and transactions, executed through an electronic network" (Lim et al., 2006). Electronic-payments requires internet connection to work, similar to the use of other e-environments such as electronic banking (e-banking), electronic shopping (e-shopping), or electronic learning (e- earning). Since e-payment refers to "financial exchange (Kalakota and Whinston, 1997), it is one of the major functions of e-banking. It could also possibly serve as a main payment mechanism for e-shopping, but not necessarily for e-learning or some e- services where payment can also be made through other payment channels".

The primary use of transactional accounts is:

Digital payments are defined as transfers of value that are initiated and/or received using electronic devices and electronic channels to transmit the instruction. Payment instruments include credit and debit transactions which can be conducted through many channels including POS terminals, ATMs, the internet and mobile devices.

Usage drivers are those factors that encourage consumers to continue with existing behaviour. Once an account has been used initially, these drivers determine whether the account will continue to be used and to what extent.

Usage barriers are those factors that deter consumers from continuing with existing behaviour. These factors prevent or limit the extent to which accounts are used.

2.3 Overview of Electronic Payment Systems in South Africa and Zimbabwe

According to the Central Bank of Zimbabwe (2016), "there are two major electronic payment systems used in South Africa and Zimbabwe, namely large value payment system (SIPS) which includes real-time electronic transfer of funds and securities system (RENTAS), and retail payment system which comprises of three categories. The first category is retail payment systems (e.g. national cheque information clearing system, shared automated teller machine (ATM) network, e-debit, Interbank, financial process exchange, and direct debit), followed by retail payment instruments (e.g. credit card, charge card, debit card, e-money), and retail payment channels (e.g. ATM, internet banking, mobile banking, and payment). These payment systems support transactions amounting to USD 8.9 trillion in 2015, which is equivalent to 58 times of Zimbabwe's gross domestic product (Central Bank of South Africa, 2012). The increase is mainly due to greater use of electronic money (27.8 transactions) and credit cards (Central Bank of South Africa, 2012).

While most consumers in South Africa still prefer to transact in cash, more are using credit and debit cards at a growing number of businesses, from large department stores to small street vendors that accept them. Increasing ubiquity of smartphones in the region has also led more consumers to conduct financial transactions and shopping-related activities on their mobile devices. Like their South African neighbours, most Zimbabweans have typically favoured cash – 68% stated that it is their preferred mode of payment in a 2013 Nielsen survey. However, Zimbabwe's payment environment is changing as more people adopted smartphones, use online

and mobile banking, and the financial infrastructure becomes more supportive of electronic payments, including mobile. This study examines the electronic payment landscape in South Africa and Zimbabwe – key drivers of electronic payment adoption as well as some of the challenges. Key drivers assessed include broad smartphone adoption, developed financial infrastructure, and consumer interest in payment innovation. Although electronic payment availability is currently limited in Zimbabwe, consumers are eager to try digital wallets and other new technologies. Barriers evaluated include preference for cash, security concerns, and consumer behaviour".

According to FinScope 2012, "In South Africa 43% of business owners (1,2 million) are financially excluded, i.e. they do not use any financial products or services (neither formal nor informal) to manage their business finances 50% of business owners (1,4 million) have/use informal mechanisms to manage their business finances 18% of business owners (475 000) are formally served, including both banked and other formal non-bank products/services 14% of business owners (382 000) are banked 7% of business owners (186 000) have/use other formal non-bank products/services. Low levels of access to and usage of (formal) financial products and services, and high dependency on internal networks (especially for credit) indicate that the current product set does not adequately address the needs of MSME owners".

2.4. Perception toward transaction accounts

Davis (1989) found out that "the overall attitude of users towards the specific information technology (IT) and its applications is a major factor determining whether an individual uses that system. Accordingly, attitude toward use is also determined by perceived ease of use of that IT application. Abrazzhevich (2001) confirmed this theory in his study where users' perception of e-payment has a significant effect on its acceptance, which is highly dependent on users' attitudes". Eastin (2002) further states that "prior adoption of IT had an identifiable impact because customers will usually adopt a new service only when they have similar experiences before. In addition, the feasibility of technology in terms of security, trust, and efficiency will also affect users' decision to use e-payment. Based upon these premises, attitude toward transaction accounts usage is operationalized in this study in terms of the perception that it is better than the traditional payment channels, that it can be trusted and is secure, easy to use, and efficient. The following sub-sections present the literature on the factors influencing transaction accounts usage".

2.5. Barriers and drivers to transaction accounts usage

Multiple factors can adversely affect access to transaction accounts and their regular use.

2.5.1. High costs

The most relevant ones are high fees in connection with transaction accounts as well as high costs (Hirrschman 1979; Carrow and Staten (1999); Mantels 2000; Stavin 2001; Karjaloto 2002), Gerard and Cuningham (2003) viewed that "perceived economic benefits to include fixed and transaction costs in transactional account usage. Transaction costs are those incurred by customers and merchants every time they carry out a business transaction (Chou et al., 2004). Accordingly, users can enjoy the benefits of low cost when they use transactional accounts as they only need to pay a nominal fee to their respective banks for the services used (Gerrard and Cunninghamm, 2003; Sonia et al., 2012; San-Martin 2013).

The Wallis Report (1997) indicated that for consumers to use technologies, the price to use technologies needed to be reasonable when compared to alternatives. Sathye (1999) argued that, in the context of transactional accounts, two kinds of price were accounted for; the normal costs associated with internet activities, and the bank costs and charges.

Polatoglu and Ekin (2001) study identified that users of transactional accounts were significantly satisfied with the cost saving factor through transactional accounts. However, researches have also suggested that consumers perceive transactional accounts as inexpensive and that it does not offer any extra cost benefits (Karjaluoto et al., 2002; Gerrard and Cunningham, 2003)". In spite of these differing discoveries, Sathye (1999) acknowledged that the costs associated with transactional accounts, such as the cost of electronic-banking activities and bank charges, had a negative effect on transactional accounts usage.

2.5.2. Low income levels and Labour informality

Low-slung income levels of large segments of a country's population hinder accounts usage (Barow, 1982; Murphy, 1983; Wiley and Richard, 1974). According to the survey conducted by Statistics South Africa in 2013, "more than 1.5 million people were running small, informal businesses in the country. These informal businesses do not easily satisfy the requirements of the formal financial sector. Banks require proper registration to open business banking accounts and offer loans, but registration fees are often prohibitively expensive for small business owners, limiting the use of such services by these businesses (Etzel, 1974; Mears and McCarty, 1978; Porter *et al.*, 1979; Yiu and Kwoen, 1987). Beck and de la Torre (2006) postulated that in both developed and developing economies, there are users of payment services that choose

not to have a transaction account even if they could afford the direct costs associated with it and do not face significant geographical challenges for access".

2.5.3. Accessibility and Limited financial literacy,

Beck, Demirguc-Kunt and Martinez Peria, (2007) stated that "Physical access to banking services can often be hampered by long distances from the next bank outlet. The success of retail payment services depends critically on the availability, quality and reliability of customer service and access points. Historically, one of the greatest barriers to transaction accounts and other financial services has been the lack of physical proximity of the respective service providers and/or the access points/channels they are offering. Customers' payment behaviour is especially sensitive to the density of access points near their home or workplace. Limited access to physical access points may reduce the probability that a transaction account or a payment instrument are adopted and, even if they are adopted, it may reduce the effective use of available payment instruments. Innovative payment services and business models offer the promise to bridge the physical divide without necessarily expanding the (physical) branch network.

Demirgüç-Kunt and Klapper (2012 argued that from a customer perspective, it is important to differentiate between those access points to be visited for the initial opening of a transaction account and/or the acquiring of specific payment instruments, and those access points utilised for the regular use of the transaction account and/or a specific payment instrument. The set of requirements to open a transaction account usually oblige the applicant to go in person to a PSP branch. However, in some countries individuals can open a simplified transaction account at a PSP agent location or online. For the ongoing use of the account through the payment instruments associated with it, a physical presence is in principle no longer necessary, as today's technology makes it possible to execute and receive all or nearly all types of transaction remotely. This, however, depends in part on access points for a transaction account being sufficiently close to the user

World bank report (2012a) indicated that proximity to bank branches or other points of access and channels is, generally, insufficient if there is limited or no interoperability between those points of access. In fact, at present, most innovative payment solutions are based on proprietary payment schemes that are not interoperable and as such can only be used at a limited number of access points.

Obtaining access to a transaction account is a necessary but not sufficient condition for the effective use of the electronic payment instruments associated with such accounts. Educational

and outreach efforts are often needed to support the necessary awareness and financial literacy that enable new and even existing account holders to make effective use of retail payment services and to expand their broader financial capabilities.

The process of transferring knowledge on the management of financial resources and on the usage of financial products and services is referred to as financial literacy, financial education or other similar terms. In the payments context, some of the key efforts in this regard include demonstration of the advantages of using electronic payment services – i.e. the safety, protections, recourse mechanisms, speed and convenience – learning how to use specific payment instruments, such as a debit card or an electronic funds transfer and building clients' trust in and comfort with a transaction account and its use. Information on the reliability of the available services, including information on the operational performance of ATMs and POS devices, can also help address potential customer concerns regarding the accessibility of their funds. For the purposes of this report, such efforts are referred to generally as financial literacy efforts.

Another relevant aspect in this context is financial awareness, i.e. the level to which end users are aware, or could become aware, of the financial product and service options available to them. End users, even some of the most knowledgeable ones, may not have easy access to, or be familiar with, certain tools that can assist them in accessing useful, trustable and updated information on such options".

2.5.4. Ease of use

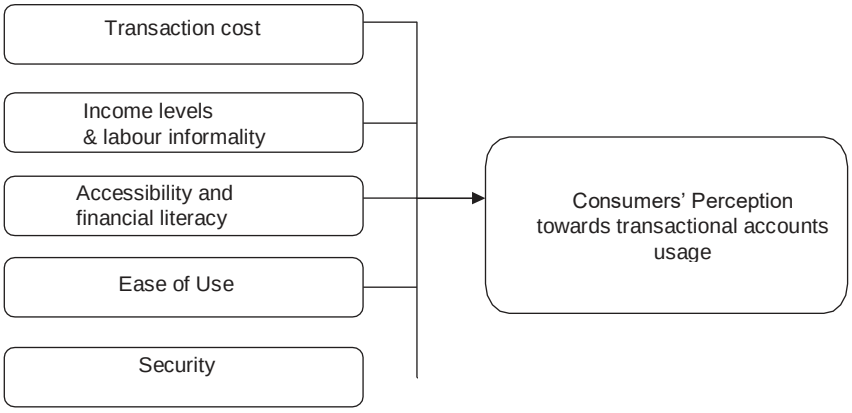
Abrazzhevich (2001) "attributes transactional accounts' failure to the system design and deployment that do not meet user requirements and expectations. Collectively, the combination of features, or the design of the transaction account and associated payment services, determine whether that account meets the needs of actual or potential customers, or at least comes close enough to be of value to such customers. The features that meet the needs of the more traditional bank client base may not meet the needs of individuals and businesses that currently do not have a transaction account. This is because many of the individuals and businesses currently excluded from this service tend to have lower and more variable incomes, live in financially isolated communities and/or are ill at ease with technology". Also supported by Bettman, 1975; Sjoberg, 1980; Stone and Gronhaug, 1993.

2.5.5. Security

Stone and Gronhaugy (1993) define "security as a perception by users that transaction accounts are unsafe. Abrazhevich (2001) attributes e-payment's failure to the system design and deployment that do not meet user requirements and expectations, while many studies view security and trust as among the very important concerns (Chellappa and Pavlou, 2002; Fatimah et al., 2000; Friedman et al., 2000; Hoffman et al., 1999; Kousaridas et al., 2008; Linck et al., 2006; Md Johar and Ahmad Awalludin, 2011; Multimedia Development Corporation, 2001; Oh et al., 2006; Poon, 2008; Singh, 1998; Streeter, 1997; Stroborn et al., 2004; Sumanjeet, 2009; Tsiakis and Sthephanides, 2005; Wang et al., 2003). A study by the Central Bank of South Africa (2009) cites lack of awareness as one of the reasons why consumers are not using e-payment. Although Ramalingam (2012) concludes that South Africa is moving toward greater e-payment adoption, interestingly, the majority of online population in Southern Africa is still considered infants with a shallow level of internet knowledge, and this builds up fears of using e-payment (Luarn and Lin, 2005; Paynter and Lim, 2001).

Sathye (1999) finds security to be a significant obstacle to transaction accounts usage, which affects the use of e-payment systems. This is true because although consumers' confidence on their chosen bank is strong, their confidence in technology remains weak. Users generally want to control the kind of data collected and for what purpose their data are processed (Kobsa, 2001, 2002)". It is for these reasons that security could be a determinant of users' decision to utilize transaction accounts (Abrazhevich, 2004).

Figure 2.1 Research Framework



Source: Authors Design

2.6 Empirical Literature

A considerable number of studies have looked at transactional accounts usage from the technical and user acceptance perspectives. Abrazhevich, 2001, 2004; Aw et al., 2011 and Bohle et al., 2000 Similarly, Eastin (2002) who studied four e-commerce activities (online

shopping, banking, investing, and e-payment systems) instituted that "prior to adoption, perceived convenience and financial benefits predict adoption decision. Chavosh et al., 2011; Elly and Kavishe, 2008 pointed out that a user's overall attitude toward a specific information technology (IT) and its applications is a major factor determining whether an individual uses that system. Accordingly, Graham (2003) indicated that attitude toward use is also determined by perceived ease of use of that IT application. Besides providing consumers with a convenient means of payment which includes users' ability to spend, store, and transport a currency value through the payment systems (Haque et al., 2009 and Harris *et al*., 2011), other primary advantages of e-payment include time and cost savings. However, whether or not e-payment leads to time and cost savings remain a question. Humphrey *et al*., 2000 and Kim *et al*., 2009; argue that adopting e-payment can be costly in terms of the time spent on learning to use internet and the new technology. Customers' trust in an internet environment is very important as there is little guarantee that the online vendor will refrain from undesirable, unethical, and opportunistic behavior such as unfair pricing, presenting inaccurate information, distributing personal data, and purchase activity without prior permission (Lim *et al.,* 2006; MacKie-Masain and White,1996). In conjunction with these studies, many key factors influencing transactional accounts usage are proposed. Hataiseree (2008) found that cash and cheques remain as popular payment modes because consumers are not convinced of the benefits of using transactional accounts. Abrazhevich (2001) attributes transactional accounts' failure to the system design and deployment that do not meet user requirements and expectations, while many studies view security and trust as among the very important concerns (Chellappa and Pavlou, 2002; Fatimah et al., 2000). A study by the Central Bank (2009) cites lack of awareness as one of the reasons why consumers are not using transactional accounts. These studies suggest that security, trust, benefits, costs, POS infrastructure availability, accessibility and ease of use are important factors influencing perception of transactional accounts usage. Transaction accounts and retail payment services, more generally, are subject to a variety of risks, including operational, liquidity, reputational, business and fraud. Innovation may introduce new dimensions to these risks and new challenges in terms of detecting, managing and mitigating them".

2.7 Conclusion

Chou et al. (2004) identified "benefits as a significant driver for transaction accounts acceptance and use. Similarly, Eastin (2002) who studied four e-commerce activities (online shopping, banking, investing, and e-payment systems) found that prior to adoption, perceived convenience and financial benefits predict adoption decision. The statistics of transactional

accounts usage in South Africa and Zimbabwe shows that the perception of users is highly changing from using cash to transactional accounts due to many reasons. For instance, the high rate of convenient use of credit relative to revolving use in South Africa reflects the attractiveness of credit and debit cards as a transactional payment medium. Many researchers maintain that trust is essential for understanding interpersonal behaviour and economic exchanges which affects customers' perception toward transactional-payment systems (Abrazhevich, 2001; Tsiakis and Sthephanides, 2005) and subsequently its adoption success (Chau and Poon, 2003; Kniberg, 2002; Lim et al., 2006). Sathye (1999) finds security to be a significant obstacle to online banking usage, which affects the use of transactional account payment systems. This is true because although consumers' confidence on their chosen bank is strong, their confidence in technology remains weak. Numerous studies have confirmed that a technology will be perceived as more useful when it is easier to use (Legris et al., 2003; Venkatesh and Davis, 2000; Wang and Li, 2011). Flavan and Guinliu (2007) pointed out that ease of use of electronic payment systems favours transactional accounts usage". Sumanjet (2010) postulated that electronic payment systems provide greater freedom to individuals in paying taxes, licenses, fees, fines, and purchases at unconventional locations and at whichever time of the day, 365 days a year.

CHAPTER THREE
METHODOLODY

3.1. Introduction

In this chapter, a sample size and data period is defined. The regression equation and a research framework with hypotheses is developed to be tested. The research framework and methodology adopted is described. This study employs a multiple regression model. This is an alternative panel specification method and it is useful for estimating linear cross-sectional time series models when the disturbances are assumed to be either heteroscedastic across panels or heteroscedastic and contemporaneously correlated across panels.

3.2. Sample size and data period

This study targeted 200 respondents based on the convenience sampling technique. The study focused on lower income target markets with frequent payment needs, specifically the students, employed and micro-business owners (employing 10 people or less) in South Africa and Zimbabwe. The data used in this empirical study was derived from the respondents during a two-year period, 2016-2017.

3.3. Survey instruments

The survey was carried out using self-administered questionnaires divided into two sections. Section A comprises of questions intended to collect demographic information (refer to Table 4.1). Section B contains statements meant to measure the independent and dependent variables. The objects were adapted from different studies, i.e. "costs (Davis, 1989), security and accessibility (Kim *et al.*, 2009), and Ease of use (Luarn and Lin, 2005). Ease of use is used to test the vicarious experience and verbal persuasion experienced by consumers in their judgment on system usage (Bandura, 1986, 1997) in this study; while items measuring consumers' perceptions of drivers of transaction account usage were developed by the authors. The study adopts a five-point Likert scale, ranging from 1 strongly disagree to 5 strongly agree with no midpoint. The five-point Likert scale is used to eliminate social desirability bias (Garland, 1991) and to push more respondents toward the positive end of the scale (Worcester and Burns, 1975). Further, research has indicated that an increase in points (six to seven to nine) on the rating scale does not improve the reliability of the ratings (Elmore and Beggs, 1975). Besides, omitting the midpoint may force respondents to provide a definite answer (Kroh, 2005)".

3.4. Analytical framework

The main objective of the empirical model used in this study is to test the hypotheses outlined in Chapter one, that is, the barriers of usage of transaction accounts in driving electronic payments are moderated by (a) cost, (b) income levels, (c) inaccessibility, (d) Ease of use (e) Security - a perception by users that transaction accounts are unsafe. Other factors that have not been included in the model as stand-alone independent variables such as limited financial literacy and labour informity will be captured by the error term in the model.

3.4.1. Regression equation

This study employs a multiple regression model. "This is an alternative panel specification method and it is useful for estimating linear cross-sectional time series models when the disturbances are assumed to be either heteroscedastic across panels or heteroscedastic and contemporaneously correlated across panels. The general form of the model can be written as:

$$\boldsymbol{Y = \alpha + \beta X_i + \mu_i} \qquad \textbf{(1)}$$

With the subscript i denoting the cross-sectional dimension. The left-hand variable $Y_i$represents the dependent variable in the model, which is the customers' perception about transaction account usage. X_i Contains the set of explanatory variables in the estimation model,
α is the constant, and β represents the coefficients and μ_i is a random term. The regression model employed for this study is also in line with what was used by Cassar and Holmes (2003), and Hall et al. (2004) with some modifications for the analysis". This takes the following form:

$$CPTAU_i = \beta_0 + \beta_1 C_i + \beta_2 II_i + \beta_3 AC_i + \beta_4 EASY_i + \beta_5 SEC_i \sum^5 {}_{i=1} X_i + \mu_i \qquad (2)$$

where CPTAU refers to Customers' perception about Transaction account usage; C is the Cost of transaction; II denotes Income levels; AC is Accessibility; EASY- Ease of Use and SEC is Security. X_i is a list of demographic characteristics made up of age, gender, educational qualification, employment and marital status. β0 is the value of the dependent variable (CPTAU) assuming all independent variables are zero, β1 to β5 are the correlation coefficients of the independent variables while ε is the error term which is assumed to be independent. The model presented above assumes an underlying relationship between the variables. A 5% significance level will be used throughout the regression analysis. The t- statistic will be used to measure the significance of the constants of regression β0, β1, β2, β3, β4 and β5. The strength

of the level to which the five independent variables C, II, AC, EASY and SEC explain the variation in CPTAU will be assessed using the coefficient of determination R2, and the Adjusted R2.

3.4.2. Measurement of variables

For each of the selected variables used in this study, customers' perception about transaction account usage (CPTAU) is the dependent variable while the independent variables are Costs (C), Income levels (II), Accessibility (AC), Ease of Use (EASY) and Security (SEC).

1. **Costs** is measured a five-point Likert scale questionnaire to semantic differential scale using bipolar adjectives (e.g. Not Effective 1, 2, 3, 4, 5 Effective) so that parametric tests can be applied. The rationale claimed is that the intervals between the scale values can be treated as equal, making it an interval scale with no midpoint. A Likert scale is an ordered scale from which respondents choose one option that best aligns with their view. It is often used to measure respondents' attitudes by asking the extent to which they agree or disagree with a question or statement.

2. **Income levels** is measured by will be measured the ordinal number of respondents who indicate that income levels are a barrier to e-payments usage which is computed as the proportion of total respondents.

3. **Accessibility** is measured by ordinary number of respondents who indicated that access to electronic payment systems and requisite infrastructure has led to their usage. This is expressed as a percentage. Within the Southern African context, it is expected that a positive relationship will be observed, that is, a higher accessibility rate will result in high usage of electronic payments. This is because electronic payment usage is highly responsive to the availability and accessibility of necessary infrastructure. "This is because many of the individuals and businesses currently excluded from this service tend to live in financially isolated communities and/or are ill at ease with technology" (Bettman, 1975; Sjoberg, 1980; Stone and Gronhaug, 1993).

4. **Ease of use** is measured the ordinal number of respondents who indicate that costs are a barrier to e-payments usage which is computed as the proportion of total

respondents. Byrne (2010) noted that "the combination of features, or the design of the transaction account and associated payment services, determine whether that account meets the needs of actual or potential customers, or at least comes close enough to be of value to such customers. The features that meet the needs of the more traditional bank client base may not meet the needs of individuals and businesses that currently do not have a transaction account".

5. **Security** is measured by the ordinary number of respondents who claim that security hinders electronic payments usage to the value of total respondents.
6. customers' perception about transaction account usage (CPTAU)

3.5. Estimation Approach

The study used cross-sectional data to estimate the regression. Hsiao (2007) notes some of the advantages of cross-sectional data as: providing more accurate inference of model parameters, controlled impact of any omitted variables, reduced collinearity and having simplified computation and statistical inference. Baltagi (2008) adds that cross-sectional data allows for control of individual heterogeneity which reduces bias in estimates.

Since the data used for this study was quantitative, a descriptive and regression analysis was used to determine the weighting, as well as provide meaningful discussion and comparison of each of the variables. In order to test the strength and degree of correlation between the independent and dependent variables, this study employed one of the cross-sectional estimation techniques.

CHAPTER FOUR
DISCUSSION OF FINDINGS

4.1. Introduction

This chapter describes the analysis of data followed by a discussion of the research findings. The findings relate to the research questions that guided the study. Data were analysed to identify, describe and to better understand what the consumer perceives to be barriers and drivers to usage of electronic payment instruments, specifically for those that hold accounts as the "easier to reach" market. Data were obtained from self-administered questionnaires. The chapter also detect multicollinearity and evaluates the research model structural equation modelling and employ a two-step modelling approach, including the assessment of the measurement model and the assessment of the structural model (Byrne, 2010). Multiple regression analysis is used in view of the study objective and hypothesis. The assessment of the structural model determines the relationship between independent and dependent variable. The research findings and results are then listed and R^2-value measured.

4.2 Descriptive Statistics

Table 4.1 shows the demographic profiles of respondents. The majority of the respondents surveyed were male even though gender composition was more or less equal. The age groups are slightly spread, the majority of respondents are aged 26 and above. More than half of them are not married and the majority hold a tertiary qualification. Nearly 32.5 percent of them earn an income of ZAR3500 (USD 291) on a monthly basis.

This is largely because 30 percent of the respondents surveyed are students. However, the use of students is justified as more than 90 percent of the respondents have used transaction accounts. To ensure accurate findings are reflected in the study, the 17 respondents who have not used transaction accounts are discarded from the sample size, leaving only 183 valid responses to be used for further analysis.

For those who used transactional accounts, they reported that location electronic payment services were available in banks, at home, or workplace, leaving only a small percentage that use e-payment services at schools. This is understandable because transactional accounts provide users with convenience in terms of performing financial transactions anywhere they like. For respondents who are using cards at banks, they need to use the machines to perform certain transactions such as paying credit card bills through the cash deposit machine and/or depositing cheques. Many of the respondents use transactional accounts at least once a week.

The majority of respondents are using network/internet-based e-payment systems, followed by ATMs, and mobile phone

Table 4.1: The demographic profiles of respondents

Variables	Description	*n*	%	Variables	Description	*n*	%
Gender	Male	103	51.5	Employment status	Employed by private	29	14.5
	Female	97	48.5		Employed government	37	18.5
					Domestic worker	33	16.5
Age	Below 20	31	15.5		Housewife	7	3.5
	21-25	31	15.5		Student	60	30
	26-30	40	20		Self-employed	31	15.5
	31-35	39	19.5		Others	3	1.5
	36-40	23	11.5				
	41-45	21	10.5	Use of e-payment system	Yes	183	98.4
	46-50	7	3.5		No	17	1.6
	50 and above	8	4				
				Location of use	Home	55	27.5
Marital status	Single	106	53		Work	55	27.5
	Married	94	47		School	10	5
					Bank	63	31.5
Education level	M/'O' levels	46	23		Do not use	17	8.5
	Diploma	39	19.5				
	Advanced diploma	14	7	Frequency of using transaction a/c	Daily	27	13.5
	Bachelor's degree	73	36.5		At least once a week	74	37
	Masters	19	9.5		At least once a month	82	41
	PhD Others	– 9	–		Never	17	8.5
			4.5				
				Channels of account usage	ATM	64	35
Income level	R3,500 and below	63	31.5		Network/internet	108	59
	R3,501-R5,500	16	8		Mobile phone	11	6
	R5,501-R7,500	48	24	Country			
	R7,501-R9,500	38	19		Zimbabwe	95	47.5
	R9,501 and above	35	17.5		South Africa	105	52.5

Note: USD1 = R12.00; *Source: Author's estimate from Research data, 2018*

4.2. Validity and reliability analysis

To satisfy validity, the questionnaires were piloted to 15 respondents prior to dissemination and as a result minor modification were made on the instrument. Additionally, the questionnaires' construct validity was also measured. Table 4.2 (South Africa) shows that the Bartlett test of sphericity is extremely significant and that the Kaiser Meyer Olkin (KMO) measure of sampling adequacy for the independent variables is 40.60. The data are therefore suitable for factor analysis. With eigenvalues 52.1 and 74.22 percent of total variance explained, five independent factors emerged from the analysis. All the items score factor loadings of 0.60 and above, and

that items within the same factor are clustered together. The same goes to the dependent variable, with 58.36percent of the variance explained.

Table 4.2: Validity and reliability rate for South Africa.

Measure	Item	Factor loadings	KMO	Eigenvalue	Variance explained %	AVE	CR	Cronbach's α
Independent variables								
Costs	5	0.683-0.835	0.743	4.932	30.824	0.582	0.874	0.854
Income levels	5	0.686-0.824		2.273	14.209	0.62	0.866	0.81
Accessibility	3	0.713-0.821		1.481	9.254	0.573	0.800	0.69
Ease of use	2	0.873-0.892		1.43	8.936	0.779	0.877	0.841
Security	2	0.839-0.869		1.262	7.887	0.73	0.844	0.794
Dependent variable								
CPTAU	4	0.604-0.854	0.639	2.29	58.360	0.573	0.84	0.739

Notes: CPTAU= Consumers' perception towards transaction accounts Source: Author's estimate from Research data, 2018

Table 4.3: Validity and reliability rate for Zimbabwe.

Measure	Item	Factor loadings	KMO	Eigenvalue	Variance explained %	AVE	CR	Cronbach's α
Independent variables								
Costs	5	0.674-0.810	0.773	4.932	31.712	0.543	0.873	0.801
Income lev	5	0.686-0.824		2.251	14.214	0.630	0.851	0.71
Accessibility	3	0.713-0.821		1.481	9.254	0.573	0.841	0.615
Ease of use	2	0.873-0.892		1.437	8.946	0.782	0.892	0.852
Security	2	0.839-0.859		1.262	7.887	0.73	0.845	0.748
Dependent variable								
CPTAU	4	0.612-0.862	0.647	2.14	61.11	0.519	0.853	0.741

Notes: CPTAU= Consumers' perception towards transaction accounts Source: Author's estimate from Research data, 2018

Table 4.3 shows the Validity and reliability rate for Zimbabwe, "the average variance extracted (AVE) and composite reliability (CR) exceed the threshold of 0.50 and 0.80, respectively, which show adequate evidence of convergent validity of all the indicator items (Fornell and Larcker, 1981). The Cronbach's α scores for all the variables are higher than 0.60, implying that the constructs demonstrate reasonably high internal consistencies" (Downing, 2004; Hair et al., 1998).

4.3. Mean and standard deviation scores

Table 4.4 shows the mean and standard deviation scores for all the items clustered under each of the variables. In terms of the independent variables, costs score the highest overall mean, followed by security, ease of use, accessibility, and income levels. All the items are found to score above 2.60. Consumers' perception towards transaction account usage scores a rather encouraging overall mean because there is a high perception that these independent variables are found to be barriers and drivers to usage of electronic payment instruments. Reliably, the majority of respondents agree that costs are the main issue, followed by security and ease of use. Consumers' income on transaction account usage scores the lowest mean. The standard deviation scores for all the items are well below 1.00, indicating consistency in the respondents' answers.

For Zimbabwe, costs scored highest mean, followed by ease of use, accessibility, income levels and security ranked last, implying that income and security is a significant obstacle to transaction accounts usage, which affects the use of e-payment systems. Unlike Zimbabwe, South Africa security scored after costs implying that South Africans do not perceive security to be a significant obstacle to transaction account usage.

Table 4.4: Mean and standard deviation for all variables.

	South Africa		**Zimbabwe**			
No.	**Mean**	**SD**	**Mean**	**SD**	**Mean**	**SD**
Costs	**3.47**	**0.499**	**3.46**	**0.489**	**3.42**	**0.497**
Income lev	**2.97**	**0.485**	**2.69**	**0.439**	**2.83**	**0.462**
Accessibility	**2.98**	**0.536**	**2.70**	**0.485**	**2.84**	**0.51**
Ease of use	**3.18**	**0.452**	**2.88**	**0.405**	**3.03**	**0.426**
Security	**3.36**	**0.649**	**2.22**	**0.580**	**3.39**	**0.61**
CPTAU	**3.33**	**0.493**	**3.01**	**0.447**	**3.17**	**0.471**

Notes: CPTAU= Consumers' perception towards transaction accounts Source: Author's estimate from Research data, 2018

Observing closely, the mean and standard deviation scores of the measured items reflect consumers' perception of transaction account usage and the factors influencing it in South Africa and Zimbabwe. The mean scores of items measuring perception of transaction account usage concur with its growing adoption, while all the five independent variables are rated more than 2.60 out of the five-point scale. Except for one item, the results imply that all the five factors are seen as very important from the context of transaction account usage, where they contributed to 56.1 percent of the reasons for transaction account usage. In terms of ranking based on the mean scores, the results seem to be consistent with consumers' perception towards

transaction account usage. To a large extent, the results are also reflected in the correlation coefficient and regression analyses.

4.4. Multicollinearity

To detect multicollinearity, correlation coefficients among the variables under investigation are analysed. "Even though Table 4.5 displays that there are significant positive correlations among the independent variables, the relationships are rather moderate (between 0.124 and 0.417). With the highest coefficient score of below the cut-off point of 0.90, the problem with multicollinearity is deemed minimized (Hair et al., 1998)". Table 4.5. Also displays that all factors are positively correlated with the perception toward transaction account usage, and the results are significant.

Table 4.5. Correlation between the variables for South Africa

Independent variables	Costs	Gender	Income Level	Employment status	Education level	Accessibility	Age	Ease of use	Marital Status	Security	CPTAU
Costs	1										
Gender	0.258**	1									
Income Level	0.259**	0.358**	1								
Employment Status	0.314**	0.217**	0.258**	1							
Education level	0.397**	0.289**	0.492*	0.357**	1						
Accessibility	0.384**	0.452	0.219**	0.347**	0.257**	1					
Age	0.382**	0.359**	0.380**	0.371**	0.289**	0.269**	1				
Ease of use	0.380**	0.258*	0.291**	0.312**	0.350**	0.234**	0.261**	1			
Marital Status	0.394**	0.296*	0.362**	0.387*	0.256**	0.284*	0.187**	0.273**	1		
Security	0.417**	0.124**	0.131	0.147*	0.125*	0.175*	0.194**	0.218**	0241**	1	
CPTAU	0.714**	0.274**	0.288**	0.263**	0.471**	0.395**	0.457	0.442**	0.387**	0.345**	1

*Note: * and **Correlation significant at 0.05 and 0.01 levels, respectively (two-tailed)*
Source: Author's estimate from Research data, 2018

The results of the correlation analysis for the Zimbabwean sample is presented in Table 4.6. The Table shows "that there are significant positive correlations among the independent variables, the relationships are rather moderate (between 0.124 and 0.473). With the highest coefficient score of below the cut-off point of 0.90, the problem with multicollinearity is deemed minimized (Hair et al., 1998)". Table 4.6. also shows that all factors are positively correlated with the perception toward transaction account usage, and the results are significant.

Table 4.6. Correlation between the variables for Zimbabwe

	Costs	Gender	Income Level	Employment status	Education level	Accessibility	Age	Ease of use	Marital Status	Security	CPTAU
Costs	1										
Gender	0.269**	1									
Income Level	0.356**	0.469**	1								
Employment Status	0.325**	0.228**	0.341**	1							
Education level	0.313**	0.274**	0.492*	0.364**	1						
Accessibility	0.372**	0.463	0.220**	0.352**	0.248**	1					
Age	0.379**	0.329**	0.378**	0.351**	0.298**	0.208**	1				
Ease of use	0.375**	0.247*	0.295**	0.372**	0.337**	0.297**	0.272**	1			
Marital Status	0.359**	0.270*	0.368**	0.367*	0.271**	0.292*	0.143**	0.290**	1		
Security	0.428**	0.124**	0.131	0.147*	0.125*	0.175*	0.194**	0.218**	0241**	1	1
CPTAU	0.789**	0.253**	0.219**	0.258**	0.481**	0.286**	0.401	0.473**	0.351**	0.382**	

*Note: * and **Correlation significant at 0.05 and 0.01 levels, respectively (two-tailed)*
Source: Author's estimate from Research data, 2018

4.5. Regression Results

Table 4.7 shows the multiple regression results between all the independent variables and the dependent variable for South Africa. "Multiple regression analysis is used in view of the study objective and hypotheses. Consistent with the correlation coefficient results, the Variance Inflation Factor (VIF) values for all the variables are below ten, indicating that the problem with multicollinearity is minimized and that the variables can be used for regression analysis (Chatterjee et al., 2000; Kleinbaum et al., 1988). With the R^2-value showing 56.1 percent of variances, costs, age, employment status, ease of use, and accessibility are significantly associated with consumers' perception toward transaction account usage in South Africa". However, security, gender, marital status and Income levels are not significantly associated with consumers' perception toward e-payment usage.

For South Africa, the coefficient of cost is positive and significant at 1% to indicate that high transaction cost is associated high perceived benefits from transaction account usage. This could be explained by the highest overall mean on costs scored, which corresponds with the highest correlation and b-values. "The finding found support from preceding studies (Chakravorti, 2003; Sumanjet, 2009; Zywicki, n.d.) that costs are a significant driver of transaction account usage. Sumanjet (2009) instituted that transaction account usage provides greater freedom to individuals in paying taxes, licenses, fees, fines, and purchases at unconventional locations and at whichever time of the day, 365 days a year. This is supported

by the study results whereby the respondents indicated that they found it easier and more convenient to conduct financial online".

The coefficient of ease of use for South Africa is positive and significant at 1% to indicate that "ease of use" is associated high perceived benefits from transaction account usage. "Although ease of use scored the fourth highest overall mean scores, this factor has been found to be associated with consumers' perception toward e-payment and the result is highly significant. The findings corroborate prior studies (Abrazhevich, 2001; Pikkarainen et al., 2004) where the respondents feel that the e-payment channels are user-friendly with easy to understand structure and content. Because of that, they found it easy to learn to use e-payment where only minimal efforts are required. The instructions provided are very clear and the steps involved to accomplish a transaction have been minimized for the convenience of users".

Although security has been found to be an important factor judging from the overall mean scores, the multiple regression results show otherwise. "The result is inconsistent with prior studies (Laforet and Li, 2005; Poon, 2008). The implication that South Africans do not perceive security to be a significant issue can be explained from the point that consumers are increasingly acknowledging the steps taken by many banking institutions and online transaction facility providers to address the challenges associated with security. Banks and online transaction facility providers would issue regular warning to users as well as update users of any occurrence of fraud. These moves would have instilled consumer's confidence to use the payment channel. However, the high mean scores and the significant positive correlation between security and perception toward e-payment imply that adequate attention still has to be paid on security issues".

Analogous to security, "Income levels has been found not to be significantly associated with consumers' perception toward transaction account usage although the variable scores the third highest overall mean and that a significant correlation result is reported. The finding is consistent with prior studies (Kim et al., 2009; Pavlou, 2001) where income is marginally or not related to the intention to transact online in South Africa".

Accessibility may score the lowest overall mean, "but the correlation coefficient and b-values are significant, suggesting that accessibility is another significant factor influencing South African consumers' perception toward e-payment. Corroborating Bandura (1986) and Eastin (2002), since the majority of respondents have experienced using e-payment, their positive

encounters allow them to continue adopting e-payment. Peers, friends, relatives, and other people who have used the transaction account services would have passed positive comments which further influence the respondents' perception. Coupled with the fact that e-payment is easy to use, the respondents would have perceived that they too have the skills and capability to complete the financial transactions".

For South African respondents, the coefficient of employment status is positive and significant at 1% to indicate employment status has been found to be significantly associated with consumers' perception toward transaction account usage. This is in line with other researchers who found that consumers perceive transactional accounts as a necessity when one is employed (Karjaluoto et al., 2002; Gerrard and Cunningham, 2003).

The coefficient of education is positive and significant at 1% to indicate that education is associated high perceived benefits from transaction account usage. This could be explained by the highest correlation and b-values, suggesting that education is another significant factor influencing South African consumers' perception toward transaction account usage.

Similar to education, age for South Africa has been found to be associated with consumers' perception towards transaction account usage and the result is highly significant. This collaborates with other researchers who stated that age is essential for understanding interpersonal behaviour and economic exchanges which affects customers' perception toward transactional-payment systems (Legris et al., 2003; Venkatesh and Davis, 2000; Wang and Li, 2011) and subsequently its adoption success.

Table 4.7: Regression results for SA

	Unstandardized coefficients		*Standardized coefficient*		*Collinearity*		
Model	***B***	**SE**	**b**	***t***	**Significance**	**Tolerance**	***VIF***
(Constant)	0.162	0.231		0.702	0.483		
Costs	**0.542**	**0.058**	**0.572**	**9.335**	**0.000*** **	**0.661**	**1.512**
Ease of use	**0.19**	**0.061**	**0.172**	**3.095**	**0.002*** **	**0.807**	**1.239**
Accessibility	**0.106**	**0.051**	**0.115**	**2.099**	**0.037** **	**0.832**	**1.202**
Security	0.031	0.043	0.041	0.74	0.46	0.821	1.217
Income Level	0.061	0.054	0.06	1.119	0.265	0.878	1.14
Gender	0.021	0.042	0.052	0.69	0.43	0.823	1.219
Employ status	0.432	0.06	0.413	7.641	0.000***	0.698	1.432
Education level	0.325	0.047	0.32	5.321	0.009***	0.658	1.241
Age	0.102	0.058	0.124	2.184	0.041**	0.801	1.201
Marital Status	0.051	0.043	0.05	1.21	0.287	0.857	1.13
F	45.153						
p-value	0.0000						
R^2	0.561;						

*Notes*** and ** demotes significance at 1% and 5% respectively. Source: Author's estimate from Research data, 2018*

The results for the Zimbabwe sample in Table 4.8 also show lower VIF and suggest the multicollinearity is minimized in the model. In addition, R^2-value shows 59.3 percent of variances, costs, income level, age, employment status, ease of use, and accessibility are significantly associated with consumers' perception toward transaction account usage whereas security, marital status and gender are not significantly associated with consumers' perception toward e transaction account usage.

For Zimbabwe, the coefficient of cost is positive and significant at 1% to indicate that high transaction cost is associated high perceived benefits from transaction account usage. Contrary to Kim et al. (2009), South Africans and Zimbabweans perceive that e-payment adoption helps them to save time and costs due to the user-friendly interface, structured transaction process, and speed.

Ease of use for Zimbabwe scored the fifth highest overall coefficient scores, this factor has been found to be associated with consumers' perception toward transaction account usage and the result is highly significant. "In fact, some providers have also offered tutorials and/or advices to their customers on how to use the various e-payment channels. To some extent, ease of use allows the respondents to think that they are in control of the transaction process. However, an

item All the terms and conditions for payment, warranty and return policies are easy to read/understand which scored a mean of below 2.50 suggests that attention is required from the e-payment services provider".

For Zimbabwe, the coefficient of security is positive implying that adequate attention still has to be paid on security issues. This partially agrees with Sathye's (1999) findings that "security is a significant obstacle to transaction accounts usage, which affects the use of e-payment systems. This is true because although consumers' confidence on their chosen bank is strong, their confidence in technology remains weak. Users generally want to control the kind of data collected and for what purpose their data are processed (Kobsa, 2001, 2002). It is for these reasons that security could be a determinant of users' decision to utilize transaction accounts (Abrazhevich, 2004).

The coefficient of income levels is positive and significant at 1% to indicate Income levels has been found to be significantly associated with consumers' perception toward transaction account usage although the variable scores the third highest overall mean and that a significant correlation result is reported. The finding is consistent with prior studies (Kim et al., 2009; Pavlou, 2001) where income is related to the intention to transact online for Zimbabwe which is opposite to what South African respondents alluded to.

The coefficient of employment status is positive and significant at 1% to indicate employment status has been found to be significantly associated with consumers' perception toward transaction account usage. Polatoglu and Ekin (2001) study identified that users of transactional accounts were significantly the ones with steady employment. However, researches have also suggested that consumers perceive transactional accounts as a necessity when one is employed (Karjaluoto et al., 2002; Gerrard and Cunningham, 2003).

Education level's correlation coefficient and b-values are significant, suggesting that education is another significant factor influencing Zimbabwe consumers' perception toward transaction account usage.

Age for Zimbabwe has been found to be associated with consumers' perception towards transaction account usage and the result is highly significant". Many researchers maintain that age is essential for understanding interpersonal behaviour and economic exchanges which affects customers' perception toward transactional-payment systems (Abrazhevich, 2001; Tsiakis and Sthephanides, 2005) and subsequently its adoption success.

Table 4.8: Regression results for Zimbabwe

	Unstandardized coefficients		*Standardized coefficient*			*Collinearity*	
Model	***B***	**SE**	**b**	***t***	**Significance**	**Tolerance**	***VIF***
(Constant)	0.173	0.242		0.713	0.494		
Costs	0.553	0.059	0.583	9.346	0.000***	0.672	1.523
Ease of use	0.17	0.05	0.161	3.084	0.005***	0.805	1.228
Accessibility	0.117	0.062	0.117	2.108	0.048**	0.843	1.213
Security	0.042	0.045	0.042	0.75	0.57	0.832	1.228
Gender	0.032	0.043	0.063	0.7	0.54	0.834	1.22
Income Level	0.472	0.065	0.07	1.12	0.027	0.687	1.25
Employ status	0.443	0.06	0.424	7.652	0.000***	0.699	1.443
Education level	0.336	0.058	0.43	5.332	0.008***	0.669	1.252
Age	0.102	0.058	0.124	2.184	0.041**	0.801	1.201
Marital Status	0.061	0.064	0.06	1.32	0.298	0.868	1.24
F	47.264						
p-value	0.0000						
R^2	0.593;						

*Notes*** and ** demotes significance at 1% and 5% respectively. Source: Author's estimate from Research data, 2018*

4.6. Conclusion

The study has achieved its overall objective through the use of a valid and reliable instrument which was administered on respondents with different backgrounds. "Since this studypurports to investigate the factors influencing consumers' perception toward transactional accounts usage, a wider representation is critical in order to generate an overall picture of the topic under investigation. While non-probability sampling techniques have drawbacks (Sekran and Bogie, 2010), interestingly this study has identified more than 98 percent of transaction account users. Notwithstanding the convenience sampling technique employed, the outcomes imply that the findings do not happen merely by chance, rather it reflects the actual transaction account users in South Africa and Zimbabwe. Further, only the responses of those who have used transaction account were analysed, hence this permits accurate results to be generated.

Overall, the results reflect the rate of transaction account usage growth in South Africa and Zimbabwe where it is accepted and used by general people irrespective of backgrounds. The encouraging usage rate is attributed to both pull and push factors. The various campaigns launched by the Central Bank and banking institutions to promote transaction account usage are parallel with the government's effort to ensure a high internet penetration rate and growth of online businesses. On the other hand, the factors investigated in this study have also contributed to the growing number of people in South Africa and Zimbabwe using e-payment.

Taking a closer look, the mean and standard deviation scores of the measured items reflect consumers' perception of transaction account usage and the factors influencing it in South Africa and Zimbabwe respectively. The mean scores of items measuring perception of transaction account usage concur with its growing adoption, while all the five independent variables are rated more than 2.60 out of the five point scale. With the exception of one item, the results imply that all the five factors are seen as very important from the context of transaction account usage, where they contributed to 56.1 percent of the reasons for transaction account usage. In terms of ranking based on the mean scores, the results seem to be consistent with consumers' perception toward transaction account usage". To a large extent, the results are also reflected in the correlation coefficient and regression analysis.

CHAPTER FIVE:
CONCLUSIONS AND RECOMMENDATIONS

5.1. Introduction

This chapter discusses the results and findings of this research, gives conclusion and both theoretical and practical implications of the research, as well as limitations, guidance for further studies and recommendations.

5.2. Summary and Conclusion

This study examines the factors influencing South African and Zimbabwean consumers' perception toward transaction account usage. The results show that transaction accounts are widely used which reflect the growth of such services in South Africa and Zimbabwe. The regression results show that three factors, i.e. costs, accessibility, and ease of use are significantly associated with consumers' perception toward transaction account usage. Interestingly, security and income levels are not significantly associated with consumers' perception toward transaction account usage although the correlation coefficient results show otherwise. Further, as such, both security and income levels warrant further investigation.

5.3. Policy Recommendations from findings

This study has narrowed the gaps of previous research in terms of investigating the five factors in a single setting. It has advanced the mainstream literature concerning transaction account usage acceptance in developing countries, particularly South Africa which has shown promising growth in transaction account usage. The validated instrument offers the possibility for similar studies to be conducted across economies to confirm whether the findings are similar or different.

Overall, the findings confirm the salience of all of the five factors investigated, allowing practical implications from the perspective of strategies to boost transaction account usage to be prescribed. Above all, it suggests that South African and Zimbabwean banks and online transaction facility providers should continually enhance their transaction account services in view of the promising growth rate. It is imperative that the services provided must meet consumers' expectations. As Bohle et al. (2000) describe it, "e-payment methods should prove themselves to be convenient and effective in a lot of more real world in order to win greater

market share from cash. The champions of e-payment systems have to maintain a competitive environment where innovation can continue to foster new products and services, and yet lower the transaction costs for consumers and businesses. On this score, the findings could serve as a guide to inform the service providers so that appropriate strategies can be developed to enhance the e-payment services. As services are enhanced, the features must be communicated to create or heighten consumers' awareness.

Costs, accessibility, and ease of use appear to be significant factors and therefore warrant extra attention from the banking institutions, online transaction facility providers, and software developers. Any enhancement to the current e-payment system must take into account these characteristics. Specifically, programmers must work with the strategy team to determine what are the core and additional benefits to be provided to users besides ensuring that the systems possess useful contents and clear instructions. The findings on ease of use and accessibility imply that consumers need to be educated on how to use the various e-payment channels. Bank representatives can play a role to inform and educate consumers about the e-payment facilities. This must include information such as terms and conditions for payment, warranty, and return policies. In order to boost confidence and enhance information quality, demonstrations via video presentations could be carried out at bank branches or to the public to show the features and user-friendliness of e-payment services. In addition, the operating procedures have to be continually re-examined based on the feedback collected from consumers

The importance of security and income levels should not be overlooked. The policy makers, banking institutions, online transaction facility providers, and software developers all have important roles to play to guarantee the security and trustworthiness of the systems. The government should continue to maintain stability and financial integrity by regulating e-payment services in order to protect consumers. Banking institutions and online transaction facility providers must ensure that the system is always secure in order to maintain trust and confidence". The software developers must keep these in mind as they design the e-payment features.

5.4. Limitations and future research

Several limitations deserve to be highlighted. The small sample size raises the issue of generalizability. Since data were collected in major geographical areas, it is difficult to

ascertain if the findings are applicable to those living in areas where computer ownership, internet connectivity, and awareness of e-payment could be among the challenges encountered. Another concern would be the variance associated with the variables.

To enhance accuracy and generalizability of the findings, a larger sample size across different geographical locations should be considered in future studies. Since the Technology Acceptance Model (TAM) states "that perceived usefulness of a technology is influenced by its perceived ease of use, future studies ought to consider perceived usefulness and possibly other variables such as anonymity, convertibility, efficiency, reliability, traceability, and applicability (Abrazhevich, 2001) which may contribute to the increase in variance. It is also possible to include the exogenous factors which may attenuate the relationship between the independent and dependent variables, and this include correlating the demographic profiles of the respondents with the factors influencing consumers' perception toward transaction account usage so that appropriate target markets can be identified. Another possible area would be to determine the differences between the consumers' expectations and the actual e-payment experience so that a gap analysis can be conducted".

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Appendices

Questionnaires Section A: the demographic profiles of respondents

	Classification variables	*Tick*	Variables	Classification variables	*Tick*
Gender	Male	☐	Employment status	Employed by private	☐
	Female	☐		Employed government	☐
				Domestic worker	☐
Age	Below 20	☐		Housewife	☐
	21-25	☐		Student	☐
	26-30	☐		Self-employed	☐
	31-35	☐		Others	☐
	36-40	☐			
	41-45	☐	Use of e-payment system	Yes	☐
	46-50	☐		No	☐
	50 and above	☐			
			Location of use	Home	☐
Marital status	Single	☐		Work	☐
	Married	☐		School	☐
				Bank	☐
Education level	M/'O' levels	☐		Do not use	☐
	Diploma	☐			
	Advanced diploma	☐	Frequency of using transaction a/c	Daily	☐
	Bachelor's degree	☐		At least once a week	☐
	Masters	☐		At least once a month	☐
	PhD	☐		Never	☐
	Others	☐			
			Channels of account usage	ATM	☐
Income level	R3,500 and below	☐		Network/internet	☐
	R3,501-R5,500	☐		Mobile phone	
	R5,501-R7,500	☐			
	R7,501-R9,500	☐			
	R9,501 and above	☐			

Note: USD1 = R12.00

Section B: Variables

On a scale of 1 to 5 where 1 = Strongly Disagree, 2= Disagree, 3 = Neither Disagree nor Agree, 4 = Agree and 5 = Strongly Agree, indicate the extent to which you agree with each of the following statements.

Section B: Variables						
		Strongly Disagree	**Disagree**	**Neither Disagree nor Agree**	**Agree**	**Strongly Agree**
	Question	**1**	**2**	**3**	**4**	**5**
Costs						
1	Monthly charges erode value for me					
2	Penalties are too high for me when conducting debit orders					
3	Perceived economic benefits to include fixed and transaction costs					

4	Satisfied with the cost saving factor through transactional accounts					
5	Registration fees are often prohibitively expensive					
Income level						
6	Low income levels hinder bank account usage					
7	Labour informality affects transaction account usage					
8	Cash is not available					
9	Confidence in the banking system					
Accessibility						
10	Set of requirements to open a transaction account					
11	Limited access to reliable infrastructure					
12	Limited access to reliable infrastructure					
Ease of use						
13	The structure and contents of the web site are easy to understand					
14	I find it is easier to conduct my financial transaction					
Security						
15	I am concerned about my security when using an e-payment system					
16	Matters of security have significant influence on me in using an e-payment system					
Consumers 'perception towards transaction account usage						
17	The e-payment system is better than traditional payment channels					
18	E-payment system is much more efficient than traditional payment channels					
19	I will choose the trusted e-payment system to make transaction					
20	I feel that a user-friendly e-payment system will influence me to adopt the system					